EXHIBIT 4

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August 6, 2021

VIA EMAIL

Cecil E. Key
DIMUROGINSBERG, P.C.
1101 King St. 610
Alexandria, Virginia 22314

Re: *Corrino Holdings LLC v. Expedia, Inc. et al*
     6:20-cv-00309-ADA (W.D.Tex.)

Counsel:

We write on behalf of Defendants Expedia, Inc. and trivago N.V. ("Defendants") to address Corrino Holdings LLC's ("Corrino") Amended Infringement Contentions, dated August 3, 2021 ("supplemental infringement contentions"), and accompanying Exhibits A-G. We note that Corrino made minor additions and changes to its contentions but that many of the deficiencies identified in our June 23, 2021, letter persist in the supplemental contentions.

We write to address certain fatal defects, without limitation as to the other deficiencies identified in the June 23, letter. We request a meet and confer prior to Wednesday, August 11 to see if we can reach an agreement. Should we fail to agree, Defendants intend to move to strike Corrino's infringement contentions with respect to asserted U.S. Patent Nos. 9,152,734 (the "'734 Patent"), 7,716,149 (the "'149 Patent"), and 6,741,188 (the "'188 Patent"), for at least the reasons detailed below:

Exhibit F - the '734 Patent

Corrino's supplemental infringement contentions confirm that the accused flight search results interface does not infringe the asserted claims of the '734 Patent, and several claim limitations are either not addressed by the supplemental contentions or are not plausible under any claim construction (or both).

No User-Submitted Stories

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Corrino's supplemental infringement contentions are crystal clear that the "users" of the Accused Instrumentalities are those individuals that access and search the accused websites seeking flight information. *See e.g.* Ex. F at 1 ("Expedia allows **users to search flights**…"), 2 ("Expedia enables **users to search query for available flight options**"). Flight search results are contended to satisfy the various "story" or "stories" requirements of the claim.

However, the method of Claim 1 requires "accessing a plurality of stories….**each story submitted by a user**." There is no allegation in the supplemental infringement contentions that flights, flight information, or flight search results are "submitted by a user." *See* Ex. F. at 4-5. Indeed, such an allegation is not plausible, as Expedia and the other Accused Functionalities do not rely on users of the website to upload or submit flight schedules, flight pricing information, or the like.

No User-Provided Indication That the Remaining Story is Associated with the Same One or More Participants

Similarly, there is nothing in the supplemental infringement contentions that would support the conclusion that "each remaining story is associated with **an indication provided by one or more users** that the remaining story is associated with the same one or more participants." Corrino contends that "Expedia filters the results associated with the different airlines ('more participants') based on criteria indicating user preferences." But the contentions do not point to any indication **provided by one or more users** nor can Corrino plausibly supplement their contentions to do so. To the extent the operating airline can be assumed to meet the "participant" limitation, there is no indication provided by the user associating the flight search result [story] with a participant [airline]. Expedia and the other Accused Functionalities do not rely on users to indicate that Flight 101 is operated by Delta (for example).

No Calculation of the Relative Importance of Each Story in the Intersection Space

Corrino's supplemental infringement contentions further demonstrate that the Accused Functionalities do not meet the limitation of "calculating relative importance of each story in the intersection space, wherein the relative importance indicates a relative overlap between the timeframe of interest and a timeframe of the respective story." Corrino's contentions confirm that no relative importance is calculated, instead each flight search result displayed in the alleged "intersection space" have a 100% overlap between the "timeframe selected by the user and departure time of each airline story in the search result." Exhibit F at 8. Moreover, despite stating that "the results are displayed based upon the calculated relative importance" the documentation cited in the supplemental contentions prove that this is false. "The **Sort** settings at the top of the page allow you to order search results to your preference, such as price, verified review score, and other criteria." Exhibit F at 8. The image pasted on the subsequent pages shows flight results ordered not by calculated relative importance but by earliest departure time (Page 9) and price (Page 10).

Exhibit B - the '149 Patent

Corrino's supplemental infringement contentions confirm that the trivago's Hotel Manager does not infringe the asserted claims of the '149 Patent, and several claim limitations are either not addressed by the supplemental contentions or are not plausible under any claim construction (or both). Further, Corrino's position stretch the claims of the '149 Patent to cover basic link tracking and reporting, a technology that predates the '149 Patent by a substantial number of years before the alleged 2006 priority date.

Failure to Plausibly Identify a "Persistent Virtual Environment"

Corrino's supplemental infringement contentions still appear to state that the "persistent virtual environment" of Claim 1 is the "Trivago Hotel Manager [that] facilitates hotel profiles ("persistent virtual environment") and is a platform that enables a user to take control of a Hotel's profile…"). Ex. B at Page 1. As the grammar of this allocation makes clear it is still the Trivago Hotel Manager that "is a platform that enables a user to take control of a Hotel's profile." Given the '149 Patent's disclosure as to "persistent virtual environment," there is no conceivable construction of the term in which the trivago Hotel Manager would satisfy this limitation.

Perhaps the supplemental contentions are attempting to refer to some unspecified hotel information that includes links to the booking page of hotels, as the viewer's interaction with these links are later asserted to be social aspects within the persistent virtual environment. Assuming for the sake of argument that this is correct, Corrino must supplement its contentions to properly point to what exactly is the persistent virtual environment that is also consistent with the assertions regarding the remaining elements of the claims.

Failure to Set Forth a Visualization that Represents a Social Aspect of the Alleged Persistent Virtual Environment

If as Corrino asserts, the trivago Hotel Manager application is the claimed "persistent virtual environment," Corrino has not identified "a visualization that represents a social aspect of said persistent virtual environment" as required by Claim 1. As annotated on Page 4, Corrino maintains that the ability to "View the number of users redirected to your booking page from trivago" shows the "social aspect … by number of viewers visiting the hotel website." Given the '149 Patent's disclosure as to the term "social aspect," there is no conceivable construction of the term in which a server redirecting a browser to a booking page would satisfy this limitation.

Even assuming arguendo that page views or redirects demonstrate a "social aspect" or "overall activity level," this visualization does not show a social aspect of the Hotel Manager application itself (the claimed persistent virtual environment). Similarly, data on number of clicks in trivago's

search engine related to particular hotel does not show a social aspect of the Hotel Manager application itself.

Exhibit A - the '188 Patent

No Dynamic Updating

As stated in our June 23, 2021 letter:

> Although the 188 Contentions stated in a conclusory fashion that "[a]s the user location changes the identified hotels are also dynamically updated" this assertion is not supported by the screenshots pasted into the contention charts. As patentee explained to the Patent Office during prosecution of the 188 Patent, "dynamically updating" requires more than merely updating the current position for a subsequent query by a user or even automatically updating the search results based on change of location.

Corrino did not update its contentions with respect to dynamic updating, other than to add a footnote that states "'The linked information is … dynamically updated' is a software limitation and source code review is required to provide more detailed contentions." *See e.g.*, Ex. A at 10. Although the question of whether updating is *dynamic* rather than *automatic* may require a source code review, nothing in the infringement contentions would suggest that the search results are even updated automatically or without user interaction (such as re-running the search). The images pasted do not suggest dynamic or automatic updating, rather than separate searches in different locations. The allegations with respect to Expedia show search results in different perspectives in two very separate locations—Jersey City, NJ and Glendale, New York—more than an hour drive apart. The contentions with respect to Cheaptickets purport to show "dynamic updating" through screenshots in Chicago, Illinois and Washington D.C. The contentions with respect to Travelocity purport to show dynamic updating through screenshots in Miami, Florida and Washington, D.C. Also, remarkably, in each of the above examples the paired screenshots purportedly evidencing dynamic updating are taken from different search platforms (website vs. app), so it is not clear how these images could possibly demonstrate dynamic updating of a single search result.

Did anyone on Corrino's legal team run a "hotels nearby" search on (for example) the triage app, drive a mile down the road, and check the application to see if the search results were automatically updated? Based on Corrino's contentions, we believe it highly unlikely that even this most basic investigation was conducted. **Please explain Corrino's investigation with respect to "dynamically updated" for each of the accused applications** Absent a compelling explanation, Defendants reserve the right to seek sanctions under Rule 11, 28 U.S.C. § 1927, or other similar provision.

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Unless Corrino agrees to withdraw its claims of infringement with respect to these three patents, we intend to file a motion to strike no later than Friday, August 13. Please provide your availability for a meet and confer as soon as possible prior to close of business on **Thursday, August 12**.

Very truly yours,

Jeffrey J. Catalano

CC: Counsel of Record